

CLAIMS

I Claim:

1. An improved stent which is designed to provide superior expansion characteristics comprising limbs which have been fabricated from a medium, having a cross sectional profile in which at least one segment is flat and straight.

2. An improved stent according to Claim 1 wherein the individual limbs are formed out of repeating elements, each of which is comprised of two curved portions having opposite directions of curvature, an intermediate straight, flat mid-portion connecting the two curved portions and a short, straight segment at each end.

3. An improved stent according to Claim 2 wherein the short, straight segments at each end of the repeating elements are joined to the short, straight segments of adjacent repeating elements.

4. An improved stent according to Claim 2 comprising a multiplicity of identical limbs which have been joined at each of the short, straight segments to the

short segments of the adjacent limbs in order to form a cylindrical structure.

5. An improved stent according to Claim 2 wherein the stent is comprised of a multiplicity of wires which have been bent back and forth in a sinusoid wave pattern to form a series of limb elements down the length of the stent, each of which limb elements has been joined at the point of the short, straight segments to the short, straight segments of adjacent limb elements in order to form a cylindrical structure.

6. An improved stent according to Claim 2 wherein the overall length of the stent is a multiple of the overall diameter of the cylinder formed by joining the individual limb elements.

7. An improved stent according to Claim 2 wherein the end of each limb has been provided with a barb in order to provide a means of attachment of the stent to the inside of a corporeal lumen.

8. An improved stent according to Claim 2

wherein the end of each limb has been provided with a series of serrations in order to provide a means of attachment of the stent to the inside of a corporeal lumen.

9. An improved stent according to Claim 2 wherein the end of at least one limb comprising the stent has been provided with a hole as an anchor point for the attachment of a delivery system release mechanism.

10. An improved stent according to Claim 2 wherein the stent has been provided with at least one strut in order to augment expansion wherein the strut has been effectively attached at the point of attachment between the adjacent limb elements.

11. An improved stent according to Claim 2 wherein the stent has been provided with a multiplicity of struts to supplement each of the limb elements which have been effectively attached at both ends to the points of attachment between adjacent limb elements.